/395 cont./

314 burn quietly, is not lost. Similar advantages are afforded by a wall of mussel shells, which grows in rings in those places chosen year after year for the dwelling. Here it is superfluous to lower the ground level in the interior by excavating, because the outer wall rises above it in any case.

At times when a storm becomes particularly strong and the fire cannot be protected, the people are wrapped in a thick cloud of ashes and smoke within their hut. While this is going on, they lie flat on the ground and cover themselves with pieces of leather. Sometimes it is hours before they get up and shake off the layer of ashes from their bodies and belongings. Sometimes they must endure heavy showers of rain which make them tremble with cold. As soon as possible they again start a gaily blazing fire and move very close to it in order to get warm through and through after all their discomfort.

372 The Indians could not do without their fire in the canoe
505 any more than in their hut, either by day or night, because on the water they are even more helplessly exposed to the hardships of the weather in their unfriendly homeland. They carry it with them everywhere and without exception. If heavy rain should extinguish it, they make straight for shore. The fire, narrowly confined, is laid in the middle section on a safe, partly wet layer of clumps of turf, gravel, and clods of earth (57), which prevents

57. On this subject Outes (g) :52 says only: "The fire, especially in the canoes, is maintained on stones and earth" /translated from Spanish/. Hyades (q) :304 gives more detailed statements.

it from burning through. It is kept going with short, thin pieces of wood, and they do not let high flames develop. They are constantly aware of the danger threatening the bark vessel from this fire. If the boat should rock badly, they extinguish the embers for safety's sake by pouring water from the sea over them. Even when the journey is smooth, they permit only a weak glow, and when someone wishes to warm himself, he moves closer to it. The boys and girls in any case crouch in the middle of the boat.

/395 cont./
372
505
They have loaded up with firewood before their departure and piled it near the fire. Here it dries a bit and /396/ is conveniently at hand when needed (58). The children feed the fire according to

[857]

58. For a longer trip they provide themselves amply with firewood and stack it, as Hyades (q) :304 has observed, at one of the two ends of the boat.

their parents' instructions.

When possible, they take only very dry wood in their canoe, since the unpleasant smoke from wet wood could scarcely be avoided. When they leave their craft upon landing, the children [857] carry the glowing sticks of wood to shore and place them on the spot which is to be the center of their new hut. Here they soon rekindle a larger fire. The Indians are scrupulously conscientious

[412]

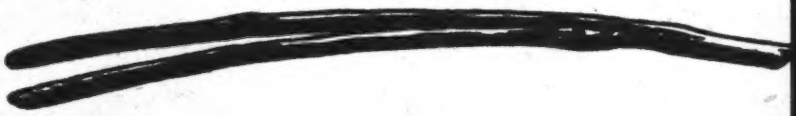

Fig. 14. Fire Tongs.

about extinguishing all glowing embers of the canoe fire by dousing them with water. If they continue their journey the next day, the children once more carry the glowing sticks of wood to the canoe and light a new fire in it.

372 Whenever a family leaves their fire, either in the canoe or in the dwelling, they take care to put out even the last glimmering bit. The fire could easily come alive again, /Fig. 14 appears here/ spread, and cause serious destruction. The glowing embers are scattered, pounded and beaten with a cudgel, covered with gravel or sand, and finally doused liberally with snow or water. This removes all danger.

372 To arrange the fire and distribute the glowing pieces of wood, the Indians reach for any stick that happens to be handy. 412 They like to use regular fire tongs which no family is without. Here they are known as láka (Fig. 14), also lókka according to BD: 278, and correspond exactly to the lákes of the Selk'nam

/438 cont./ 1. The Bark Canoe

484 505 On land our Yamana do not undertake long marches, but content themselves with the walking necessary to gather wood or shells and to get game. Their territory is not suitable for land journeys. Without exception, they travel from one island to another, from one shore to another, in their bark canoe. Even though they /439/ could go a long distance along the beach, they prefer to travel by water which is easier and more comfortable. The canoe is absolutely indispensable for them. In case an individual family or small group have lost this vessel, they find themselves in a state of emergency which they must remedy, the sooner the better and absolutely imperatively. As water nomads they could not, under any circumstances, forego this method of transportation for any length of time (120).

120. The indispensable importance of the canoe for our natives has been variously stressed. Spegazzini (a): 161 calls it "the object of greatest importance" /translated from Spanish/ and Dabbene (b):180 "an object of prime necessity for the Yahgan" /translated from Spanish/. Other opinions are of a similar nature.

501 The method of canoe construction is somewhat peculiar and differs at first glance from the boats of other peoples. The products of the country, which in themselves are meager, are chosen with intelligent circumspection and used, each in its way, to turn out a resistant and durable vessel. As a whole it looks graceful, its form is pleasing. In its details it shows taste, and its lines are agreeable.

Regardless of many minor details, it strikes everyone who judges it as a masterpiece of efficiency and a supreme achievement of the technical ability of these Indians (121). Everyone is not

121. Luschan:8 came to the following conviction: "In comparison with [the skiff-like

/450 cont./

506 to a high flame. This must be avoided at all costs, so that the
372 side walls will not be endangered. A moderate glow without a
501 leaping flame suffices.

505 The firewood is kept partly near the hearth, ɨf, partly in
372 the stern. It has been stacked in orderly fashion to save space. The people of the west must always take along large amounts of wood; a small supply is adequate for the people of the east, which they pile up near the hearth. Wherever the latter land, they easily find dry driftwood, whereas the former cannot count on this. Quite dry wood has been carefully chosen for the trip, since damp wood causes smoke which the occupants in the cramped canoe can hardly evade. As a matter of course they leave the wood of Drimys winteri, which gives off a thick, biting smoke, behind on the shore.

The girls squat near the fire and tend it according to instructions from their mother. It is their task before the departure to carry a glowing log from the hut-fire to the hearth in the canoe and to fan a new flame. When they land, another glowing stick of wood from the canoe serves to kindle the fire in the newly erected hut. With scrupulous care they extinguish every spark from the fire in the vessel so that there is no danger of its bursting into flames.

501 Even the most careful canoe construction does not prevent
415 some water from constantly oozing in between the seams (139).

139. In Wieghardt:31 and elsewhere we read: "So much water constantly comes in that the people continually have to bail it out" /translated from Spanish/.

It collects near the hearth at a place that has been purposely left open, that is, the space of a hand's breadth between the loosely laid bark pieces, ɨlax. The girls bail it out with a special scoop made either of bark or seal leather. For both kinds one first cuts out a rectangular piece which is then bent, the bark piece in the direction of its longitudinal fibers. After the two straight edges are joined with a strip of whalebone or a few rushes, making a seam, a bottom is cut out to fit this cylinder, which is also sewed on. Not infrequently a small handle of rushes is added in the

/451 cont./

501 283 is always left in the canoe, either rolled up in a ball or wound into a few coils. It is used where steep banks make it impossible to draw the vessel onto land. One end is knotted to the first or second crossbar, witéga; the other is wound around a stone or a tree trunk. This rope, which is not very strong, is used to fasten the canoe only in very quiet waters to prevent the boat's being carried off by the ebb and flow of the tide. Because of its lightness, it is much more suitable for this purpose than a heavier leather thong would be (141).

141. In his time, Snow (a):II, 16 called attention to it: "The ropes they had to fasten their canoes were made of grass rudely platted" /cited in English/.

501 462 The few items listed here, oar, hearth, scoop, and rope are necessary adjuncts or accessories of the vessel. /Fig. 31 appears here./ The woman has charge of them also, and she sees to their replacements so that she will not at some time be seriously embarrassed or endangered.

/452/ δ. Its Efficiency

505 Their restless, wandering life forces the Yamana to carry with them wherever they go all their material possessions, without exception. These do not necessarily belong to the canoe, but no one can part with them. They are distributed in such a way that the man keeps his weapons in the bow, and the woman has all the other implements and little baskets, skins, and pieces of meat in the stern. The children occupy the center section; except for the insignificant trifles which they hang on their bodies, they do not possess anything. The canoe as such is extremely light and is, therefore, not suitable for transporting loads. Although it is hard to say definitely how much the articles necessary to the adults weigh, it is obvious that it cannot be much. At most, a large sea lion that a man has killed is loaded on.

The number of people that a given canoe can accommodate depends on their weight and the existing weather conditions. They

/452 cont./

505 will venture to cross a quiet bay with an overload that they would never take out into an open channel. The question as to how many persons can be accommodated in a canoe cannot be answered in a single word; at any rate, there is enough room for the parents and the unmarried children of a family, a total of about six or seven (142); Dabbene (b):180 speaks of "up to eight

142. According to Hyades (q):304 it includes "as an ordinary load, seven persons, three of whom are children, one of these being carried on the back or held at the breast of its mother" /translated from French/.

or ten persons" /translated from Spanish/. They step into the divisions formed by the crosspieces. Here, without exception, they squat in the bottom of the canoe and remain quiet in their crouched position, all but the woman who must paddle. Anyone who stands up risks upsetting the unsteady balance. The children sit deep down in the center section and sometimes their eyes do not reach even to the level of the gunwale. Thus, they add a great deal to the stability of the vessel. The man's place is at the bow, the rear third belongs to the woman. The weight of at least two adults is necessary when the sea is turbulent; actual ballast is unknown.

502 We have repeatedly mentioned that the bark canoe of our Yamana, because of its light construction and unsubstantial load, maintains an unstable equilibrium on the water. For this very reason each of the occupants avoids gross body movements, and actual rowing is out of place here. The Indians possess a large measure of self-control, even the children can remain for hours almost motionless in one spot, to prevent the vessel from rocking. L'Hermite was reminded of "Venetian gondolas" (p. 53 /untranslated/) when he saw the bark canoes in Nassau Gulf, and the beautiful comparison Goicueta used for the vessel of the Halakwulup also applies to /453/ that of our Fuegians. On the surface of the water it really does look "like a four-day moon, with the elevated points" /translated from Spanish/, gliding by motionlessly.